Landscape Reconstruction of the Southern Transdanubian *Puszta* (1683–1735) Based on 18th-Century Border Litigations¹

In memory of Zoltán Ilyés

Gábor Máté

Department of Ethnography and Cultural Anthropology, University of Pécs

Abstract: *Puszta* is a widely known phenomenon that primarily denotes a deserted countryside and not the flat areas, vegetation, cattle grazing and some picturesque landscape items that are usually associated with. In Southern Transdanubia, a borderline during Ottoman rule for 143 years, settlement desertion became a crucial and overwhelming factor from 1543 to 1686. My paper addresses the age of reorganization (1686–1720), right after the Ottomans were defeated, and focuses on land use and the general appearance of the land. There are two major views on this situation. Some historians hold that the elaboration took place in a scarcely populated and "wild," natural area, thus the process of colonization was inevitable. Meanwhile, other scholars who worked with local archival sources have pointed out that plenty of families survived there whose livelihood changed during the Ottoman occupation but they filled the land with human activities. This resulted in a different type of land structure, which was far from the so-called medieval landscape.

In my paper I follow the second theory and depict the landscape in a minor area on the basis of archival data. I analyze the practices of land use in order to show the way the "*puszta*" did and did not exist. I also investigate the key factors that affected a new landscape shift, which brought about the colonial landscape.

Keywords: landscape history, historical ethnography, environmental history

THE PUSZTA

The *puszta* (Hungarian steppe) is surely a familiar term even to non-Hungarian readers, which originally meant desolate land, designating the boundaries and in-lots of abandoned settlements. Lands that have become desolate and deserted proliferated in Hungary as a result of wars in the Ottoman period (1526–1686). In Hungarian scholarship, the process

¹ During research for this study, the author received the MTA Bolyai János Research Fellowship (BO / 00 620/14/1).

leading to the destruction of villages is called the desolation, and it is divided into two periods. The first phase of the destruction of settlements can be placed in the $14-15^{\text{th}}$ century, which is discussed as the early or first desolation. Behind this desolation are factors that are characteristic of other regions of Europe, too, especially epidemics, negative climate changes and the resulting outbreaks of famine, which then triggered a decrease in rural populations and their migration into the cities (DUBY 1978; NEUMANN 2003; SIMMS 1976; SZABÓ 1971:183–188). The phenomenon can be primarily observed on the Great Hungarian Plain, but at least as far as research shows, it has caused no significant change in Southwestern Transdanubia, the subject of this study (MÜLLER 1975:40-42). The second period of desolation emerged as a result of the Ottoman invasion. After the lost Battle of Mohács (1526) and the occupation of Buda (1541) and Southern Transdanubia (1543–44), more than half of the territory of today's Hungary became a buffer zone between empires, a borderland - in other words, a "permanent frontier" where thousands of villages withered away and turned to wasteland (HOFER 1965; 1985; HOLLANDER 1960-61; SZAKÁLY 1997:151-163). As such, the *puszta* is not rooted in a constructive era of economic and cultural growth, but can rather be regarded as the legacy of a particularly decadent period of destruction of people and structures. This is so even though a kind of dialectic prevailed, and after the devastation it was repopulated from time to time. The Hungarian *puszta* admired in romantic 19th-century paintings is only a figurative representation the landscape, vegetation, and economic activities maintaining that landscape, especially extensive animal husbandry and pastoral culture. These are, so to speak, superimposed, lifestyle-related landscape features. It transmitted this secondary set of phenomena to the world during the developmentally arrested but somewhat consolidated era of the $18-19^{\text{th}}$ century, when the symptoms characteristic of the former conflict zones have not yet completely disappeared.² The environmentdependent lifestyles typical of the puszta survived on the Great Plain the longest, thus the puszta became the distinct landscape of the Great Plain. In Southern Transdanubia, these areas were eradicated through various re-populating efforts in the early 18th century, so the *puszta* remained only in name, and even its meaning has changed. The meaning of the expression 'puszta,' instead of desolate village, destroyed landscape, became 'landlord's plant', since this is where the landlord developed his estate centers, where he settled large numbers of agricultural workers.

Hungarian scholars have long been concerned with the question of what the *puszta* was like in the Ottoman era. Ethnographic, historical and demographic research was primarily focused on the changes in population and settlement systems; presentation of the landscape – inseparable from the above, yet an independent issue – usually served to support quantifiable information. In presenting the landscape, they relied mostly on reports of 17th-century travelers, ambassadors, military officers, romantic stories of missionary priests, early 18th-century works describing the country, and letters written by new settlers addressed to those left in the old country; in other words, their information was gained from contemporary narrative works – written mainly from an external perspective – that considered the landscape dreary, wild, uncultivated (BÉL 1728; SZILÁGYI 1983:44–49; SZITA 1987; MOLNÁR 2006:111–116; GAÁL 1984; VÁRNAGY

² For the 'discovery' of the Hungarian Plain and the herdsman see: SINKÓ 1989.

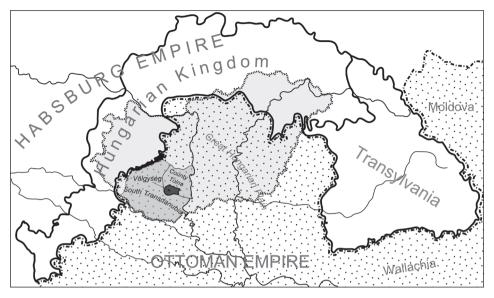


Figure 1. The location of Southern Transdanubia and the Völgység on a 1683 map of the Carpathian Basin

1990:156). The professional literature of the era sometimes adopted uncritically the views of the narrative sources, and paid little to no attention to other contemporary experiences or messages from other sources.³ It is a widespread and still popular belief that after the expulsion of the Ottomans, the settlers of Southern Transdanubia were greeted by an untamed environment, a wilderness that they then converted into a cultivated landscape (Ács 1987:43-45; BAI 2008; FOLLAJTÁR 1942:4; GLATZ 2006:276, 285; KOSÁRY 1990:56-57; Polónyi 1966:226-227; Schmidt 1939:13-15; Szekfű 1936:393-395; SZITA 1993:9; WELLMANN 1979:12; 1987:62; WEIDLEIN 1935: 673, 681). At the same time, numerous authors painted a more nuanced picture of the turn of the 17–18th century.⁴ Already in 1933 Tibor Mendöl pointed out that the terrain was neither unoccupied nor uncultivated, but the land was poor, ruined and devastated (MENDÖL 1993:170-178). The other, divergent viewpoint which assumes wilderness and barbarism, persists to the present day; throughout its four editions, in the Chronicle of Magyars, for example, we can read: "The central regions hit with the worst devastation were home to a society accustomed to living in temporary makeshift houses in a brushy, marshy environment, in tattered clothing, devoid of their humanity and amongst degenerated social morals" (GLATZ 2006:276). Historians agree that besides the Long Turkish War (15-year war) of the turn of the 16–17th century, the greatest destruction was caused by the wars of the turn

³ Good summary: MAKKAI 1987:1425.

⁴ ANDRÁSFALVY 2011:264–265; Ágoston – OBORNI 2000:86–92; KATUS 2010:538; MAKKAI 1987:1425– 1430; MAKSAY 1976:50–54; TAKÁCS 1976:19–35; an excellent study in terms of source criticism and methodology about the forts and their surroundings in Tolna County is provided by: GAÁL 1984. A fundamental work in terms of medieval villages, local place-name research and landscape history: WEIDLEIN 1934; 1935; 1936.

of the 17–18th century. This highly destructive era itself can be divided into three war events: the siege of Vienna (1683), the liberation of Buda and Transdanubia (1686), and Rákóczi's War of Independence (1703–1711).

This study examines the effects of the resulting settlement and landscape deterioration, as well as the landscape changes after resettlement. The scene is a smaller geographical unit in Southern Transdanubia, the so-called Völgység, where roughly 87% of the late medieval settlements perished during the Ottoman era.⁵ During the reorganization (18th century), about 42% of them were revived, making their area approximately 2–3 times larger than it was for the medieval villages. Therefore, the key question of this study is: to what degree was the environment "aboriginal" before and during these wars, and did the *puszta* truly devolve into wilderness or something else?

BORDER LITIGATIONS

My paper is based on 18th-century border litigations that proliferated after the Ottoman era and provide an excellent regional coverage for the history of the environment. These border litigations arose mainly after the repopulation of the area (1730–1760s), when the number of *pusztas* has been greatly reduced, and in this context it became an important issue where the boundaries between settlements ran, which theoretically continued with the same boundaries after the liberation as in the Ottoman era. In practice, however, the boundaries changed.

The starting point of lawsuits was almost always a dispute among peasants. Some were more peaceful in nature, such as illegal plowing or grazing. When caught, the offender had to pay a ransom (plow, ax, ox, etc.), or he was bound and dragged into prison, that is, the perpetrator himself became a pawn to be redeemed by his associates for money. The border disputes sometimes degenerated into bloody brawls or even domineering led by *ispáns* (county heads) and *hajdús* (mercenary soldiers).⁶ Luckily for the researcher, however, settlement of these estate litigations was not reached via concessions among each other but entrusted to the county jurisdiction.

The litigations gave rise to several types of documents, which I will not describe here. Only the so-called witness testimonies (*metalis inquisitio*), most valuable from the ethnographic point of view, will be discussed, which recorded the knowledge base of local people (peasants, shepherds, *hajdús*, etc.) regarding boundaries. Of the litigations in the western part of the Völgység, I used 21 *metalis inquisitio*, which included a total of 242 witness testimonies. But before I turn to the substantive analysis, it is necessary to speak about the main structural units of the testimonies in order to understand what these documents are suitable for and what they are not.

1. The boundary specification (*ductus*) records the location of the boundary line point by point. The *ductus* was not always composed into the document. Of the 21 documents examined, only eight contain a *ductus*; in two cases the cause of action (*de eo utrum*?)

⁵ Of 88 medieval settlements, 77 were lost during the 16–17th century (dominantly during Ottoman period).

⁶ More details on the ethnographic research of borderland litigations: Ва́ктн 1990; Е́детő 1989; Т. Ме́кеу in 1967; То́тн 1987.

conforms to the boundary specification, and in eleven cases the boundary signs are listed by the witnesses in their testimonies (*fassiones testis*).

2. The cause of action (*deutrum* or *de eo utrum?*), edited by officials, contains questions regarding knowledge of borders, the location of the *puszta*, etc., which were posed to the witnesses.

3. The witness testimony (fassiones testis) contains the sworn affidavit of the witnesses.

The boundary was 'common knowledge' among the summoned witnesses, which was sometimes – as already mentioned – composed into a special *ductus*. If the boundary description occurs in the testimonies, the witnesses usually describe the boundary with slight deviations, which noticeably does not even reflect their own words, but rather the mutually experienced information recorded by the clerk. However, the recollections of the witnesses are mostly unique and divergent, as they got to know the terrain differently and at different times. From the point of view of source criticism, it is notable that since the witnesses received money from the landlord, their testimony does not necessarily coincide with what happened. Of course, in most cases there is no question about it, because the witnesses took an oath before the officials. In terms of the reconstruction of the history of the environment, any iniquity would not be of great importance, as during border inspections (*oculata*), the border points inspected in the presence of the sheriff and jurors were certainly real. And memories relating to the distant past had to be believable, that is, true to life in their time.

Of the structural elements presented, the most important are the boundary description and the testimony. The *ductus* mainly describes the structure of the landscape, the species, landforms, and the characteristics of the landscape. The testimonies contain much less information about vegetation. Conversely, they provide very valuable data about the activities carried out on the land, about farming and everyday events, and they also provide the historical outlook of the lawsuits, since the witnesses mostly recalled the historical landscape (20, 30, 40 years ago) and confronted it with the present. Of course, the boundary lawsuits cannot reflect the peculiarities of land use typical of the entire landscape; especially lacking is the information relating to the inner areas of the former villages and their environment. I tried to compensate for these 'inherent weaknesses' when choosing the study area. My goal was to find a border for analysis that was as long as possible, revealed land segments with different characteristics, and encompassed the entire terrain of perished settlements. The selection of the trail was guided by my empirical knowledge gained during the processing of other lawsuits and my own survey of the land.

STUDY AREA

Based on the border lawsuits, I put together a reverse S-shape boundary line running north to south in the western half of the Völgység (Figure 2), which stretches along the borders of revitalized settlements and *pusztas*. The main dividing line is 37 km long.⁷ In two locations I added auxiliary sections, which return to the main border line

⁷ Measurement were made with the help of the MePAR browser using a topographic map overlay.

ES Â Lázi pr Döbrököz Csurgo pr. 1712 Mekényes Györgyi pr. 1735 2 :0 Mágocs Nagyhajmás 718 Kápás 17191 div Köveskut 3/a/ Gyertvános-Olaszfalu/pr. erdő div. Ráckozár 3/b 1717 Mocsolad Bikal Gerényes 1729 172/1 5/b Nagyág Szalatnak Köblén Almás pr. 1719 1726 5/a Kéthely pr. aszar é Kárász Egregy Köblény 1726 Egregy 5/a Esterházy

Figure 2. The villages and pusztas of the study area9

in a way that the auxiliary and main borders each encompass a larger piece of land. The northern piece of land is a disputed border section, the so-called "Gyertyános forest" (805 ha), where there was a short-lived Serb settlement attached to Nagyhaimás (puszta Nagyhajmás) at the turn of the 17–18th century. The southern piece of land is also contentious land, likely the entire terrain of a perished medieval village (Almás) (442 ha). The two auxiliary border sections run about 12 kilometers.8

The main dividing line starts in the groves of the Kapos river and ends at the headwaters of the Izmény-Györei watercourse. I tried to 'draw the border' so that the topography, vegetation microclimatic and features of the landscape would be most pronounced. Section I of the land survey intersects the asymmetrical hilly lines fundamentally characteristic of the region (geographical

Völgység) (1, 2), which have steep northern sides and southern sides that slope and run long. It passes through the south-facing slopes of the Nagyhajmás and Kápás hills dissected by streams (3/a; 4), while the auxiliary section (3/b) encircles the space called Gyertyános forest along the streams. Section II of the land survey passes through the top of the Gerényes hill (5/a), and the auxiliary section descends from here and goes up the west-facing Róka-hill (5/b), then curves back to the main line. The main line continues along the top of the ridge toward Egregy (6) in a southeastern direction. The last section (7) passes through areas dissected by initially north- then east-oriented south-north directional ridges, stream valleys and small pools.



⁸ In the table, supplemental border sections are specially marked.

⁹ The map does not show all destroyed late-medieval villages. The boundary lines are exact only in the case of the studied borderlines, the others are approximate.

Part	Section	Settlement borders used in documents ¹⁰	Year	Reference number	Litigating estates		
	1	Csurgó (pr.) – Györgyi (pr.)	1757	MNL Est. Rep. 92. f. 8. n. 316. a.	Esterházy – Pauline Fathers		
		Mekényes – Györgyi (pr.)					
	2	Mekényes – Györgyi (pr.)	1759	MNL Est. Rep. 92. f. 8. n. 317. a.	Esterházy – Pauline Fathers		
		Mekényes – Nagyhajmás					
		Köveskút (pr.) – Nagyhajmás					
I.	3/a	Nagyhajmás – Bikal; Mágocs – Bikal	1751	MNL BML IV. 1. f. 3. VIII. 206.	Pauline Fathers – Petrovszky		
	3/b	Nagyhajmás – Bikal; Mágocs – Bikal	1752	MNL BML IV. 1. f. 3. VIII. 238.			
	4	Mocsolád – Bikal	1745	MNL BML IV. 1. f. 3. V. 123.	Sztankovánszky – Petrovszky Sztankovánszky – Pauline Fathers		
		Mocsolád – Mágocs					
	5/a	Háb (pr.) – Mocsolád	1756	MNL Est. Rep. 92. f. 10. n. 306.	Esterházy – Sztankovánszky		
		Gerényes – Mocsolád					
		Vaszar – Almás (pr) (Mocsolád) ¹¹					
	5/b	Almás – Ravaszlik	1756	MNL Est. Rep. 92. f. 10. n. 386.	Esterházy – Sztankovánszky		
II.		Mocsolád – Almás			– Petrovszky		
		Szalatnak – Almás					
		Kéthely – Almás					
	6	Vaszar – Kéthely	1765	MNL BML IV. 1. f. 3. XXII. 655	Petrovszky – Esterházy		
	7	Egregy – Kéthely	1743	MNL BML IV. 1. f. 3. III. 76.	Petrovszky – Bishopric of Pécs		
		Egregy – Szalatnak					
		Kárász – Szalatnak					

Figure 3. Sections of the border line; municipalities and pusztas intersecting within the section (pr.); date of the lawsuit; reference number of the archival document primarily used for the reconstruction; and names of the estates involved in the lawsuit. (MNL = National Archives of Hungary. Est = Archives of Esterházy Family BML = Baranya County Archives)

¹⁰ The chance of reconstructing the total perimeter of the borderland of a settlement from a single document is minimal. Documents usually refer only to sections of the borderland between settlements. ¹¹ The location of Almás was the subject of the legal case.

THE EXTENT OF DESTRUCTION, THE RE-GRANTING OF ESTATES

There were 14 villages in the time of the border litigations listed in the table (1743– 1765). In addition, nine *pusztas*, that is, legally separate settlements with no residents, as well as two legally not independent boundary regions were registered, which in medieval sources appeared as villages. Memories of them were lost during the long Ottoman rule, but it is also possible that the resourceful stewards and peasants deliberately denied their village status in order to acquisition the land. During the 18th century, the *pusztas* were granted by the landlords to the villages for use, to facilitate the accession of settler communities then at the turn of the 18–19th century, most of them were administratively incorporated into one of the neighboring settlements. By then the landlord was no longer looking out for the interests of the peasants; the former *puszta* was used to develop his own estate, erecting barns, granaries, hunting huts, and other economic structures on it, even building his castle or mansion on it. Comparing all data in the examined documents, there remains a recollection of 24 former settlements on both sides of the borderline. The number of villages was even higher in medieval times, there still being 34 settlements along the borderline at the end of the 15th century.¹² Of the 34 settlements, only five were not destroyed in the 16–17th centuries (Gerényes, Nagyág, Vaszar, Egregy, Kárász). The whole area north of the five indicated settlements was part of the *puszta* landscape, on which Serb settlers who surrendered to the Ottomans arrived in the 17th century. The Serbs¹³ retained the names and boundaries of the Hungarian villages, or rather the Ottoman administration preserved them, to which the Serbs adapted. However, the Serbs rarely occupied the interior of perished Hungarian villages; they mostly built their houses in new locations. Nevertheless, it was their villages that the desolation affected, some of which have become uninhabited by the time of the siege of Vienna (1683), and the somewhat restored Serbian settlement system as a whole was destroyed during Rákóczi's War of Independence.14

After the liberation, the region was initially overseen by the Simontornya and later the Pécs provisorate (inspectorate) of the royal chamber. The only new-old landowner was the Diocese of Pécs, whose medieval estates were returned in 1703 as a new endowment.¹⁵ The Esterházy family bought the villages of the Völgység in 1692, which were part of the Dombóvár Dominion (ÓDOR 1992:67). The Pauline Fathers became owners in 1719 (BORSY 2001:99). Count Farkas Rindsmaul and the Lengyel family acquired lands in the region around 1720. The Lengyel family sold their villages to

¹² Döbrököz, Csurgó, Lázi, Györgyi, Mekényes, Nagyhajmás, Köveskút, Bikal, Kozár, Móri, Vargány, Mocsolád, Kápás, Olaszfalu, Varjas, Háb, Ravaszlik, Almás, Gerényes, Nagyág, Vaszar, Köszvényes, Bágyon, Kéthely, Szalatnak, Ábel, Bakóca, Lipóca, Petrőc, Bolda, Egregy, Kárász, Köbli. Based on historical sources (K. NÉMETH 2015), the settlement of Varsa can also be placed in the Mekényes Valley.

¹³ Determining the ethnicity of the Slavic populations from the Balkans that migrated north during the Ottoman era is very problematic, in this paper I use the term 'Serb' instead of 'Rác' which is generally used in historical data, although 'rác' denomination is accepted in Hungarian professional literature as a generic name of 18th century orthodox Slavic population of South Hungary (see: HEGYI 2002:29).

¹⁴ In detail: Máté 2016.

¹⁵ BORSY 2003:191. The bishopric/see owned the settlements even during the Ottoman rule (Füzes 1997:109).

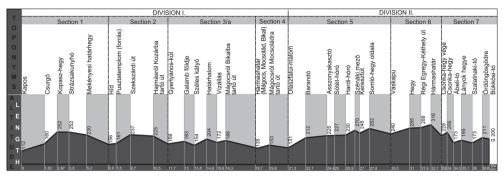
the Sztankovánszky family,¹⁶ Rindsmaul to the Petrovszky family, and thus the lawsuits were executed by them.¹⁷ The villages were repopulated in different times, as can be seen in Figure 2 and Figure 4. It is important to note that during the resettlement, the majority of the villages were already inhabited and the landscape was being used; the data indicates the re-settlement and the departure (displacement) of the old residents.

Landowners	Esterházy family	Petrovszky family	Pauline Father's Monastery of Pécs	Bishopric of Pécs	Sztankovánszky family		
Date of entry into possession	1692	1732	1719	1703	1724		
Village (pagus, possessio)	Mekényes (1735) Ráckozár (1717) Gerényes (old) Nagyág (old) Vaszar (old)	Szalatnak (1719) Köblény (1726) Bikal (1721)	Mágocs (1718) Nagyhajmás (1719)	Egregy (old) Kárász (old)	Mocsolád (1729)		
Estate (praedium)	Csurgó Köveskút Almás (contested affiliation)	Kéthely	Györgyi	_	Ravaszlik Almás (contested affiliation)		
Borderland – (<i>diverticulum</i>)		_	Olaszfalu Kápás (contested status and affiliation	_	-		

Figure 4. Ownership and types of settlements during the border litigations (1743–1759)

¹⁶ The Lengyel family received it from the chamber after paying the liberation fee; the repopulation of the *puszta* occurred during the Sztankovánszkys (Füzes 1998:74–75).

¹⁷ József Petrovszky I bought Köblény and Bikal from Farkas Rindsmaul in 1724 (SONKOLY 2001:87), and Szalatnak from the Sauska family, where Serbs lived – with the exception of Szalatnak and Kéthely. In place of the Serbs Petrovszky settled Germans.



THE EVALUATION OF THE LAND SURVEYS IN TERMS OF LANDSCAPE HISTORY

Figure 5. Cross section of the main line with the most important boundary points

Border lawsuits are an extremely versatile resource. Ethnography has utilized the information immanent in them in several areas, such as in researching migration, clearing farming, settlement decay, but the most comprehensive analysis was conducted in the field of legal ethnography.¹⁸ They contain rich analysis opportunities from the aspects of environmental history and landscape history, due to the fact that they include additional data not only about boundary marking objects (boundary trees, boundary mounds), but also other objects endowed with boundary roles (trench, unmarked tree, dilapidated building, etc.), as well as farming and land use.

Conclusions drawn from the physical conditions of boundary mounds (conditions and locations of clearing)

In reports of land surveys performed in the first half of the 18th century we see few boundary mounds, but their numbers grow over time. This is mainly observed in those regional sections (No. 1; No. 7) from which several land survey reports are readily available. A tendency is detectable in which the mounds multiplied mainly at the expense of natural elements (landforms, waters). Do not think, however, that this was the result of a 'modernization' process crowding out the more ancient or primitive boundary markers. Rather, during periods of depopulation, boundaries were associated with natural objects out of necessity, as landscape activity was reduced and fewer arable lands and meadows were used. It is noteworthy that in the early border lawsuits from the early 18th century, witnesses recall boundary mounds established during Ottoman times and surveyed in the presence of the Ottoman landlord. From all this we can conclude that artificially formed boundary markers, especially the creation of mounds, was a consequence of more consolidated conditions, while during periods of desolation, elements that were 'not created' but lived in memory or were associated with natural objects took on the main role.

¹⁸ Some important examples: BÁRTH 1989; Kocsis 1979; TAKÁCS 1976; 1980; 1987.

From the environmental history aspect, the investigation of the decades-old mounds might be successful, because even if the environment changes, the mounds will pass on the vegetation. It is not unusual, for example, that a tree would be planted in the center of the mound in order to protect the mound from erosion, or vice versa, they would pile a mound around the tree so that the marker would be even more evident. In the examined lawsuits, however, only two cases serve as an example of this. The grass cover of the mounds demonstrated how old and undisturbed they were. From the perspective of vegetation history, however, they do not carry a significant meaning, since boundary mounds in a wooded landscape - especially at the edge of a forest - will obviously sooner or later grow a grass cover. It is more useful to turn our attention to the counties surrounding the mounds, where we are more likely to observe climax plant communities characteristic of the landscape. In phase 3, for example, after the resettlements, in place of the forests between Bikal and Nagyhajmás, the original vegetation shrank to a single shrubby, bushy county. The shepherds grazing their oxen on the nearby croplands rested on the boundary mounds erected in the county, which were followed by wider, grassy, wooded strips of land. In the shrubby borderland we can obviously see the vestiges of vegetation developed during the desolation, the remains of which are now completely gone. Recollections about the mounds often contain ethnographically important references to daily life and farming, which support the witness' knowledge of the landscape. From such stories we can learn about the brawl that broke about among the shepherds of Nagyág and Kárász because of grazing, or that a shepherd slept on top of the boundary mound. Ethnographically very valuable is also the information about a swineherd that summoned his swine from the top of the mound with a horn.¹⁹

It is not closely related to the subject, but it is important to note that the borderland is associated with a rich world of beliefs. It was a popular belief that there is treasure hidden underneath the boundary mounds. And it may also be more of a legend that the Ottomans hid burned wine or dead coals under the mounds. Whether the acts related to the boundary mounds are true or not, their role was similar to other memorial (repeated) rites on the mound (child beating, cursing, or gifting), which basically served to maintain the memory of the mounds and the borderland.

Species and conditions of boundary trees, forest types, and natural conditions today

Landscape surveys always recorded boundary trees according to species. In the 21 documents that this study is based on, I found a total of 91 relating to trees (Figure 6). Of the boundary sections under investigation, only section 3/b did not have a boundary tree, as the border followed a stream and then a road; the only mention relating to a shrub occurred in the testimony. Moreover, this section had only one mound, which can be explained with the rapid decay of the tiny village that was established here. The table does not include data relating to tree species from other land surveys conducted in the same section but at different times, because I could not have ruled out the eventuality that a tree might be included in the database twice, and land sections with good resources

¹⁹ MNL BML VII. 197. 1749.

(3–4 documents each) might have been over-represented. The data in Figure 6, of course, do not apply to trees of the same age; they provide samples of vegetation native roughly from the mid-17th century until the mid-18th century.

Of the boundary trees on the borderline, most are oak, followed by beech and Turkey oak. Their high ratio is not surprising. After all, they are the most resistant tree species, and the natural vegetation of the area is made up of their pure stands or their associations, which (especially the beech forests) get also mixed with linden. Among the hardwoods, compared to the current situation, the spread of the beech shows the greatest change. The data show that the beech was native in the whole territory of the Völgység, and it was especially typical in the wet valleys and on the western and northern slopes. The beech in the Mecsek and Hegyhát mountains are even today known for the so-called elevation inversion, that is, when a species, in contrast with its usual location on the mountaintop, grows in the damp, cool microclimate of the valley. Its wider spread and decline is confirmed by current place names in the region. It is noteworthy that the beech occurs most often in section II, where it is still a potential species. In section 5/b, the boundary runs for a while within a beech forest, presumably in an old timber forest, which was probably the same in the Middle Ages as well. Due to changes in forestry concepts and the extension of arable lands, beech is no longer typical neither here nor in parts to the north of here.

Among the softwood trees, it seems that the maple was considered relevant as a species for boundary markings. It occurs on numerous occasions in the land surveys listed in the table. The poplar appears rarely, and not as a marked tree but as a scenically orienting direction marker (dry, tall). From miscellaneous lawsuits we know that the alder may have had a similar role. Based on this, we can say that even near the valley floors hardwood trees as well as other border markers, especially mounds, were preferred. Among the fruit trees pear and walnut are the most common. Pear trees have a notoriously long life; it was a typical borderland tree in the 19–20th century, being preferentially planted at the edge of arable lands and meadows. Its occurrence is certainly linked with more intense human presence. Grapes are discussed as part of the woody vegetation, which are mentioned as being near the continuous villages as well as Csurgó. Among them, one was certainly newly planted (Ravaszlik), and two were old (Csurgó, Nagyág).

An essential and, from the aspect of vegetation history, interesting issue to mention is that in one case, an old, disused road was marked by a pine tree. Since this place was a south-facing hillside with a warmer microclimate, our first thought might be that the pine tree was planted. During a nearby land survey, it was spruce (i.e., forest fir) that was used as a boundary marker between Köblény and Vékény.²⁰ The trees here, however, were mentioned not as south-facing but in their position at the valley bottom. Are these data indicating then the former natural occurrence of pine? Perhaps so, as 20–30 km west, around Zselic, there were still pine forests in the 18th century, which were certainly not planted but arose naturally through spontaneous afforestation (REUTER 1962). If this was so, then perhaps due to the colder climate of the Middle Ages the pine may have been native in the studied region, appearing as a kind of weed (similarly to birch) and forming mixed stands. However, this could only be determined with certainty if more data were to surface.

²⁰ MNL BML IV. 1. f. 3. III. 76. 1743.

	Part I					Part II				I.	II.		
Sections	1. 1757	2. 1759	3/a. 1751	3/b. 1745	4. 1745	5/a. 1756	5/b. 1756 ²¹	6. 1765	7. 1765	I. r.	II. r.	S.	%
oak	1	12				3	6	4	6	13	19	32	35%
Turkey oak	3	1	3		1	1				8	1	9	10%
beech		1	1			2	18			2	20	22	24%
maple		1			2					3		3	3%
hornbeam		1	2						1	3	1	4	4%
linden		1	1				4		1	2	5	7	8%
pear					1	1	1			1	2	3	4%
pine					1					1		1	1%
hazelnut						1	1				2	2	2%
walnut						1					1	1	1%
grape ²²	1					2				1	2	3	4%
poplar		1					1			1	1	2	2%
birch				1		1				1	1	2	2%
Total	5	18	7	1	5	12	31	4	8	26	54	91	100%

Figure 6. Species-based distribution of trees on the boundaries according to the documents listed in Figure 3

Conditions of boundary trees and circumstances of the destruction of forests

As I mentioned in the introduction, the literature about the local area painted the landscape conditions after the Ottoman era with very dark colors. For example Nóra Tóth Andrásné Polónyi writes about it as follows: "the once thriving cultural landscapes of Transdanubia sank to the lowest level of decay," where "the newly sprung wild vegetation, the thicket obscured the fruits of human hands, of human labor, sometimes even their traces. In place of populous settlements, cultivated lands and lush vineyards, barren, desolate wilderness overgrown by thicket and thorn bushes – '*Heide*' according to foreign travelers – took over." The main question then is, what size forests were there in the area? Did the region become a wilderness, which only regained its cultural landscape condition thanks to settlers?

After the wars of liberation, was it really a wilderness that welcomed the settlers? Can the landscape truly be considered a wilderness, and did it turn into a cultural landscape pleasing to the human eye thanks to the work of settlers – especially Germans?

The landscape descriptions and testimonies provide a reliable and emotion-free picture of the conditions of the region's landscape in the late 17th and early 18th century, which

²¹ Section of borderland between settlements signed with special trees.

²² Meaning vineyard.

cannot be said of all contemporary records. Then again, it is completely understandable that not much good has been written about this region. The newcomers had to cope with not only a more continental weather and adversity caused by economic difficulties (lack of seeds and animals), but also with epidemics and hundreds of other problems while they settled in the region and made it their home. In the following I analyze the region's forests and deforestation at the beginning of the 18th century by dividing the main boundary line into two sections.

The section between 1–4 intersects two asymmetrical rows of hills, then continues along the southern foothills all the way to the Olaszfalu mill. The upper row of hills (no. 1), which runs between Mekényes and Csurgó, is woodlands today. At the top of the hill there were clearings in Ottoman times, so they were abandoned at the end of the 17th century and only after the 18th-century resettlement were they cultivated again. At the top of the hill is a cropland called Kur Pasha's Beech, which indicates that the area was under cultivation even in the Ottoman world, but also beautifully expresses the original wooded nature of the area. Witnesses report large clearings near the Tisztás Valley in the 1730–40s. The boundary leaving Pusztaszentegyház in Mekényes and creeping up the southern knolls finds cleared croplands with hornbeam and oak, which were formed in the 1730s, 1740s. At the top of the southern ridge there were forests previously, which continued up to the border point of section 2, to the aptly named Hornbeam Fountain, and beyond that to the Nemerőd water. Witnesses spoke of timber woods above the Hornbeam Fountain, too. The vast woodland was only interrupted in one place by a small cropland. The data suggest that a part of this continuous forest that falls closer to the border might have been old-growth, while the parts closer to the villages may have developed after the liberation wars (1686). The clearings also began in the forests closer to the former villages, which must have been 20- to 30-year-old shrubby groves and young forests. The area surrounded by sections 3/a and 3/b was a forest at the turn of the century. The Serbs of Nagyhajmás fleeing the county tax collectors built their houses and lived in this borderland for about ten years. It is unfortunately not known whether at the time of their settlement this area had been a forest, but we do know that the turkey oak forests above it began to be cleared in the 1710s by Hungarians from Kárász, since at the time Bikal and Nagyhajmás had very few residents, and without draft animals to boot. In the 1730s the reinforced Croats also joined the deforestation. The Hungarians cultivated not only this area but also Rácbikal, which was abandoned by the Serbs in 1704. They began to clear the medieval location of Bikal village, which was about 1.5 km from the Serb village. Forests probably dominated between Bikal and Nagyhajmás as well, since the Croats from Bikal settled on the fields newly cleared by the Hungarians, while the settlers of Hajmás settled in the forests. The high degree of forestation is supported by the testimony of another witness from Hajmás, who in his memoirs described the landscape as follows: "all forest then, being that fields were limited."23

There are no forests and clearings mentioned in the border section south of Mágocs, running from Kápás to Olaszfalu (no. 4), which may indicate that it may have had inherently fewer forests and was used as arable land during Ottoman times. It is not an insignificant factor that this is where the most productive croplands with brown chernozem soil begin, which lie flatter and are easily cultivated.

²³ MNL BML IV. 1. f. 3. VIII. 224. 1751.

In the second section (Nos. 5/a to 7) the landscape is much more forested. The border climbs to the top of Barandó Hill and to the end of section 5/a, running along a ridge all the way to Vaskapu. Despite the difficult terrain and soil conditions, there are fields, fruit trees, roads and other anthropogenic elements in this borderland, thus the landscape is already more humanized in nature, which is supported by a variety of old Hungarian place names related to economic and historical events. West of this border we find continuous settlements (Nagyág, Vaszar). Of course there were clearings here, too, even some newly cut and overrun by buckwheat, and clearings planted with corn were also mentioned, which the residents of Nagyág divided among themselves by drawing arrows. The ridge with the clearings was not really suitable for plowing. Presumably they were only cleared and plowed in the 1730s, which perhaps intensified as a result of provisions from the surrounding estates prohibiting the use of the *puszta*. At the same time, some of the local lands may have been cultivated since the Middle Ages, seeing that the Bodó castle stood nearby and the fields, in a fashion characteristic of medieval agricultural techniques, ran longitudinally, a narrow isthmus stretching along the ridge, and there were vineyards as well.

Sections 6 and 7 are hilly, sometimes mountainous in character, forested almost all the way, and deforested lands are found in fewer places. From Vaskapu to Lányok Hill there were fewer arable lands, while from Lányok Hill to the Bükkös Lake there were more. In these two sections, the medieval settlement network regenerated slower than the average, with only Szalatnak having been rebuilt in the 18th century. The majority of the small medieval, partly noble villages (Abel, Bakóca, Petrőc, Kéthely, Szalatnak, Lipóca, Ciklód, Bágyon, Köszvényes) has been depopulated by the end of the 16th century, their boundaries therefore no longer used by the Serbs but rather the Hungarian residents of Mecsek villages. At the site of the settlements, forest husbandry became the dominant form of economy. The situation changed when leasing options for the *puszta* ceased, from the 1730s onwards. They could no longer use the arable lands around Mágocs, Bikal, Szalatnak, so the Hungarians of Mecsek began clearing and dividing amongst themselves the areas of the small villages consolidated in the 16th century. First and foremost they plowed the flatter mountaintops, but definitely not the hillsides or valley bottoms where meadows lay until the end of the 19th century. Within the studied area, due to the lack of landscape reorganization, this is where the characteristics of the environmental changes associated with desolation were most preserved.

Changes in the land use system

In the case of old villages continually inhabited in the past, even in Ottoman times, a land use system made up of three zones evolved. Under Ottoman rule, feudal legal relationships were terminated, the significance of the lot diminished for taxation purposes, and as a result, much of the land became communal property over time. Communal lands were divided among themselves by the drawing of lots. It can be, however, presumed that there survived a three-field system of farming inherited from the Middle Ages, at least on croplands close to the villages. The villages' inner zone of arable area could have been in permanent use. The same cannot be said of the more remote arable lands between forests. In these places, they certainly practiced fallowing, that is, periodically letting

the forest grow up, then with a slash-and-burn method clearing the underbrush which ensured the nutrient supply in the hard-to-cultivate, clay-based agricultural land. The third area used by the continuous villages was the borderland of the perished villages. In the more distant *pusztas*, sometimes at half a day's journey, land use was based on privately owned, freely acquired plots. They only paid one-ninth taxes after the harvest, being exempt from the tithe. Of course they cultivated not only the croplands but also the meadows and forests of the *puszta*, after which they paid sheaf tax and acorn tax to the landlord, and in Ottoman times the spahi from Pécs and Nádasd occupying the area's villages also demanded money or produce for the use of the *puszta*. Peculiar, persistent agricultural elements of the southern villages were the mountain croplands developed during the Middle Ages (Egregy, Vaszar, Kárász), which were in continuous use, or were put into use in the early 18th century through deforestation (Egregy: Csonka Hill).²⁴ These lands, formerly typically called 'wheels,' tended to align with the hills in long, ribbon-like strips, had a slight slope, and were often located in forests.

In the case of settler villages, land use of freely acquired plots was less important. After a short period of communal land tenure, they became allotment-based villages using the three-field system according to the standard feudal landlord-tenant system of relations. Thus the new villages became the embodiment of a system that was endemic elsewhere.

It was characteristic of both settler and old villages that greater deforestation took place in community collaboration, whereby they won not individual but rather common lands, which were then allocated through division to owners of draft animals for as long as the communal land existed. The development of these so-called arrow lands is also documented in the case of the resettled Mágocs (Kúr Pasha's Beech) and Nagyág (Somló Hill). In the 1730s the Croats of Nagyhajmás "did terrible clearing" in the forests adjacent to Köveskút, and cultivated the land thus obtained in classes. The relatively overpopulated settler villages quickly exhausted their resources and set their eyes on the spare lands of the nearby villages. At the end of the 18th century the Germans of Szalatnak and Köblény commenced some fierce deforestation in the borderlands of neighboring villages, where they destroyed old beech and oak forests suitable for acorn grazing.

The two- or three-field land use system, which was endemic in this area in the Middle Ages and which replaced cultivation of privately owned and communal lands as well as farming on cleared lands, all formed due to the desolation under Ottoman occupation and changing farming conditions, was restored in the area by the mid-18th century. It is quite possible that expansions of land through deforestation continued for another 200 years.

Forest animal husbandry

As the extent of forests in the area has grown significantly due to desolation, forest husbandry has obviously become a major activity in landscape utilization. This primarily meant raising hogs, but sheep, goats and cattle also grazed in the forest. The most important was certainly hog-breeding. The hog was important not only because of its role as food, but also because of its marketability. It is no exaggeration to say that

²⁴ About persistent and relict elements: ILYÉS 2007.

hogs were as important in the utilization of the *pusztas* of Southern Transdanubia as cattle were in the utilization of the *pusztas* of the Great Plain. The hogs were kept in the woods in summer and winter. Each village had its own hog pasture where hogs meant for domestic consumption grazed. Hog herds awaiting sale were mostly herded into the remote corners of the extended villages of Mecsek and to the forests of the *pusztas*, where they were fattened up on acorn. Not all peasants had the means to do this, only richer peasants who could afford to hire shepherds and merchants leased the *pusztas*. The beech and oak forests were leased out by the landlord for acorn fees. Acorn grazing happened when the acorns dropped in August – September, but mostly when the more muggy, humid weather set in and the fallen acorns already begun to germinate. Early winter was the best time for acorn grazing. At acorn ripening the demand for forests increased, "acorn-seeking" shepherds and hunters roamed the old woods, assessing and seizing the forest for their clients of for themselves. These were often residents of remote villages, in local terms "country folks," peasant farmers from Apar, Somberek, Szakcsi, but most commonly the droves and flocks came from the immediate neighborhood.

The domestic swine, also called "the sörtvés (or sörtvéles) swine," was distinguished from the "forest swine," often just called "sylvan," by visible morphological features. We do not know the variety of the hogs bred here, unless we consider them to be the siska (ziska) swine recorded by Bél, which according to him was characterized by large drooping ears and occurred in the Serb population (BÉL 1979:337). In the Serbian language siska means oak gall, in Hungarian it means a hog with drooping ears (but it does not refer to the variety). According to Lajos Takács siska is equal with Szalonta swine and was typical in Hungarian households in the 18–19th century (TAKÁCS 1985:24–26).

Although it was an extensive husbandry, forest husbandry could not dispense with structures and the presence of a swineherd. The swineherd built a sty or barn for the swine, and a farmstead for himself, which did not depart too much from its 19–20th-century peers. Swine farms were mostly in the valleys, close to springs. Swineherds used dogs to herd and keep the flocks of swine at bay, and even a shepherd's horn that has gone out of use in the 19th century. Data referring to feed also records that in the groves and areas of softwood, the swine were "beaded," that is, the mistletoe growing on the trees was collected for them.

The forest grazed by hogs did by no means have the appearance of a 'wilderness.' On the contrary, the grazed forest was much cleaner, because the hog turns the forest floor, digs and chews shrubs, roots, tree stumps, thus its shrub level remains clear. Wilderness was only visible in the fallow meadows in the early phases of succession, or in the sometimes truly impenetrable groves. It is certain that the area was basically favorable to hog breeding; testimonials referring to raising beef cattle are not known from this region. Data are also available about the keeping of oxen in connection with land clearing and plowing. Sheep and goats required a living space similar to hogs, both of which can feel at home in the rapidly budding bushes and fallow croplands. Sheep- and goat-raising cropped up almost exclusively in connection with Serbs, which is certainly not random but can be explained by differences in lifestyle. Given that these two domesticated animals consume the bushy and grassy vegetation, over time they significantly transform the landscape structure. This obviously played an important role in the process of deforestation and clearing, and in the preservation of the openness and grassland vegetation of certain regions.

Livestock farming on the *puszta* was practiced freely until the estates were repopulated. However, with the arrival of settlers, the landlord leased out fewer and fewer forests. Forest pastures almost completely disappeared in the eastern and central areas of the geographical Völgység during the 18th-century deforestation. In contrast, in the more forested parts of the Mecsek and the adjacent Hegyhát, the tradition of grazing lived on until the end of the 19th century. Although not strictly part of the topic of the study, it is important to note that the folklore of the Hungarian villages, especially of the oldest communities that survived the Ottoman occupation, was woven through with thousands of motifs related to forest husbandry that burgeoned in Ottoman times and to the struggles against the Turks. According to György Martin, the most archaic layers and types of Hungarian dance culture can be found here, whose preservation is partly due to the survival of extensive animal husbandry. Their typical old dance style is the swineherd's dance (jumping dance), which remained remarkably popular until the late 19th century. Their old style folk songs belong to the most archaic, descending quintswitching tunes in the whole Hungarian language area, reflecting even in their texts the natural and social features of pastoral life.²⁵ In other words, local folklore used this world as its last great "inspiration," which made it well distinguishable from other regions at the turn of the 20th century.

Hydrographic elements, pasture management

The area is very rich in water, the average annual precipitation is 700–750 mm. According to climate historical data, the 16–17th century was even wetter. It is therefore not surprising that there is a lot of data in the land surveys referring to water and waterways.

It says a lot about the condition of the valleys that three of the region's key creeks are referred to as "mud" in the sources, and the waterside was often called a grove. These terms suggest a slow waterflood, a marshiness of the valleys. Méhész Creek, Hábi Creek, and the Izmény-Györe stream were also called "mud" by the witnesses, which on the one hand refers to the natural bedrock conditions of these waters, on the other hand to their impassability. In wetter periods, without a bridge, they were probably difficult to cross. This is clear in one of the witness testimonies, which states that, for lack of a bridge, people from Nagyág carrying wine barrels were forced to drag their wagons through the mud.²⁶ On the border of the *puszta* between Kéthely and Almás, an extensive grovey, swampy section formed, which was called Black Grove in the sources, and its remaining parts are today called Black Mud. The land surveys often mention potholes and soaks, which were places for hogs to drink or wallow. The water level is also a synonym for these names, with the Serbian equivalent of kalilo.²⁷ Potholes were found not only in the valleys but also on higher grounds, especially near springs, or on hills with bad drainage and clay soil with high rainwater retention. Pothole featured often

²⁵ MARTIN 1970:51; on the music of jumping dances (Southern Transdanubia, with examples from Egregy): PAKSA 2010:39–63.

²⁶ MNL BML IV. 1. f. 3. VIII. 238. 1752.

²⁷ On the farmsteads of the Serbian Morović swineherds, there were bogs called *kaljužište, kaljuga*, which play a similar role as the kalilo.

in the memoirs of shepherds grazing in the area. According to the testimony of Thodor Regylics, for example, shepherds of several villages would gather at the pothole on the southeastern border of the Almás *puszta* to water their swine.²⁸ This also shows that watercourses were also important in terms of social relations. With the decrease in swine farming and deforestation, the role of potholes and soaks also decreased, and because of the expansion of arable lands, they were even covered. Such was the case along the road between Mágocs and Szekszárd, where a large pothole was filled with tree stumps, then filled with soil until it became arable.

From the point of view of landscape history, it is a key question whether unregulated waters and the expansion of groves were new phenomena in the landscape; was it degradation or the consequences of the Little Ice Age? The perished medieval villages were along creeks and springs. The settlements were located in the bottom of the valleys, on the outskirts of the floodplains of the creeks. It is inconceivable that the reedy, willowy groves and thickets around the villages had poor drainage, since it was not possible to make a living from them; moreover, they would have hampered transport. They certainly kept the waters of the valley at bay, and watermills were key in benefiting from and managing water. The testimonies mention numerous watermills, the history of which was fractured by the period of liberation struggles and Rákóczi's War of Independence. Some of the mills can be associated with medieval settlements (e.g., Kápás mill, Olaszfalu mill, Ravaszlik mill), so we can speak of the continuity of mill sites. Only the new settlers began to rebuild them in the 1720s, the last known owners being Serbs. The mills had either channels or trenches, their levees in both cases providing passage through the valley.

We encounter mentions of only three lakes in the land surveys. Interestingly, all three were located in the 7th section of the borderland, near a perished medieval settlement. *Abel* Lake must have been near Abel, Szalatnak Lake near the medieval Szalatnak, and Bükkösd Lake near the settlement of Bolda, which raises the possibility that they had also been mill ponds. The meadows' succession can be easily followed through the land surveys. The abandoned meadows turned into areas of sedge and reed, then groves of alder and willow appeared; such run-down meadows, abandoned 50-70 years ago, can still be found in the region today, indicating that in recent decades a similar trend of land-desertion has emerged. In the 18th century, birch grew on these abandoned fields and meadows, evidence of which can be found only in place names, besides the testimonies. The presence of the birch was so unthinkable in the middle of the 20th century that the eminent linguist and forester Camillo Reuter associated the place names related to birch forests with the terms wet and damp, rejecting any connections with the tree type (REUTER 1961:31). Although the meadows responded extremely sensitively to depopulation and many meadows became groves and thickets, some areas remained usable all along. Such is, for example, the meadow near the *puszta* church in Mekényes, which continued to be used even after the destruction.

We need to mention the springs as well, because some of the springs were of paramount importance. Csurgó puszta was probably named after the spring that lay on the vineyard hill; the spring was called Csurgó or Szentkút (Holy Well), which may indicate the sacred importance of the spring in the past. And the fountain near Pusztaszentegyház in

²⁸ MNL Est. Rep. 92. f. 10. n. 394. 1757.

Mekényes was probably the main water source for medieval Mekényes. A distinguished border marker was the spring called Gyertyános Fountain, where the borders of Köveskút, Bikal and Nagyhajmás met. Not only was it a memorable triple border, but also a site suitable for shepherds' farmsteads.

Community objects, roads

A dominant part of the landscape consisted of objects related to the old settlements. The land surveys mention three church ruins (Mekényes, Mányok, Szalatnak) and two cemeteries (at the border of Bikal and Mágocs). In addition, there are six direct references to the demise of Serb villages in the 18th century (Györgyi, Nagyhajmás, Puszta Nagyhajmás, Mágocs, Mocsolád, Bikal). Houses, interior objects are less often mentioned; in the section of the landscape this study focuses on, witnesses only mentioned the perished pit-houses of Nagyhaimás. Along the borderline we have far more data about perished sacred buildings than what the lawsuits recorded. In Györgyi a monastery and a church, in Mágocs a monastery and a parish church, in Kéthely, Köblény, Petrőc, Mocsolád, Kozár and Nagyhajmás each the ruins of a church could be found, all of which still carried the memories of a disappearing Hungarian world.²⁹ Since the medieval borders were more or less inherited, church ruins are less frequent near the borders. On the other hand, mills or mill races on the outskirts of the border are often mentioned (Mekényes, Kápás, Olaszfalu, Ravaszlik, and perhaps the Bardi well on the northern border of Kéthely). The sources only rarely and succinctly speak of the desolation. If they do say something, they speak mostly about the wars or war events causing the devastation, or about the approximate time they happened. Near the borders, the most frequent objects were those associated with animal husbandry, such as barns, stables, pastoral farmsteads, but these did not have a permanent site. Nonetheless they were still important in terms of identifying sites.

The most important border marking objects were undoubtedly the roads, which were sometimes followed by the border for a kilometer, but they were mentioned in the land surveys even when they just approached or crossed the borderline. It is obviously because they are recognizable landforms that preserve their form for a long time. The region is covered in loess of alternating thickness. Because of traffic, the soil readily erodes and the path is scored into the loess. As a result, loess reefs of varying depths and forms developed. It sheds light on the importance of roads that in the border descriptions of the nine legal cases used for preparing the land survey (map, table), 22 roads were mentioned. In the files, the roads were allocated various quality indicators, from which we can infer their physical parameters (trenched, deep, hooked, plowed, etc.), age (old, new, trodden, bare, newly dug), and their specific use. In all cases the land surveys recorded the direction of the road, that is, the villages connected (directly or indirectly) by the road. The disintegrated roads linked mostly the old medieval Hungarian villages, but certain routes were already in use in much earlier times. Due to space constraints, I forgo further analysis of the network of roads (Máré 2014).

²⁹ in detail: К. Néметн 2015a

Forestry, hunting, beekeeping

In the previous chapters we have seen that it is reasonable to speak of a reforestation period after 1683. Was the expansion of forests a consequence of non-use, or what travelers and settlers complained so much about, the dominance of wilderness?

There is no doubt that the tree was an essential raw material. Forestry meant the utilization of the forest, the cutting and collection of firewood, the extraction of timber for construction (shingles, pillar wood, walling, etc.) and wood necessary for making tools. When we consider the fact that in the region wood construction was common and dominant until the end of the 18th century, and that large numbers of animals were raised in the forests, we must recognize that this was forest husbandry rather than a wilderness sprawling at the edges of the villages. But let's look at the details unfolding from the legal cases. It is remarkable that the witnesses never went to the forest to "cut wood," but to conduct activities related to the utilization of wood. They cut hoops for barrels, went to collect nuts, looked for pillar wood, cut timber for beams, etc. The trees of the wooded landscape were thus selectively used. At the same time, forestry was inseparable from hunting, animal husbandry and beekeeping, which was usually conducted at the same time, in the same space.

The witnesses often reached the plot of land which was the focus of the legal case during a hunt, where a more knowledgeable, older hunter listed for them the border marking points, which is why this ancient activity is often mentioned. Thus the hunt did not happen in an 'unknown territory,' in the wild; hunters were well aware of the boundaries of former villages, having a share of their goods. Hunting and other 'browsing' activities were significant not only for the quarry; it also deepened their knowledge of the landscape important for subsequent settlement and *puszta* leasing (meadows, acorn forests). The legal cases provide data about two hunting methods: catching prey with a trap and hunting with a rifle. Trapping is remembered as the socalled wolf's pit, which was mainly used to trap wild boar – not wolves. Rifle hunting was likely done with weapons left over from the wars against the Turks. Serbs and Hungarians alike established a way of life conducive to self-defense, but the armed men also joined the larger troops crossing the countryside (the Hungarians the Christian troops and Rákóczi's kuruc troops). Beyond the acquisition of a quarry, it was passion that drove the hunters, which we can infer from the wording ("he being a lover of hunting"). Hunts were organized along strands of kinship and friendship. In terms of rifle hunting methods, we have data about scouting, that is, beast-seeking, stalking forms of stealth hunting, as well as ambushing methods. Most often they hunted "old beasts" (big game) - roe, deer, wild boar. No matter how surprising, peasant rifle hunting was a licit activity. Tolna County, for example, only outlawed the right to bear arms in 1726 (K. BALOG 1978:256), which shows that there must have been a relative abundance of wildlife, and also that public security and general conditions drifted very slowly towards the conventions of feudalism. Nevertheless, contemporary narratives that speak of huge damages by wildlife and of fearsome beasts and thereby paint a much more horrific picture of the degraded natural and social conditions must be considered excessive, or rather one-sided. In the original home of the settlers, their opportunities for peasant hunting were probably much more limited because the landlord may have already appropriated that right for himself.

The habitat of the forest wild game coincided with the habitat of the grazed livestock, thus – and because of unregulated hunting – there could not have been too much wild game. By today's analogies, in order to preserve the purity of breed characteristics, it is necessary and important to restrain the wildlife and separate it from the domestic livestock. The swineherds along the river Sava, for example, pay great attention to the separation of wild and farmed animals (at least during times of reproduction), because the wild boar grows slower, and its meat is of a different structure and taste. We must therefore say that the proliferation of wildlife was a consequence of the unregulated use of the landscape, the freedom to hunt, and a more extensive, basically forest-based animal husbandry. However, this situation was experienced by the locals not as a 'drop in production levels,' but as an opportunity, such as the Hungarians of Diósberény, who, according to a contemporary memoir, benefited greatly from the forest (GALAMBOS 1989:201).

The collection of wild honey was also a popular activity. There are a lot of data about it, but they do not provide details of the activity so honey extraction methods are not very well known to us. On one occasion we learn that the operation caused the destruction of the tree, while in the other cases honey extraction methods are not mentioned. The testimonies do not specify it, but we know from other bailiff's files that the honey was bought by the estates, and we do not doubt that honey was a well-marketable product during Ottoman times as well. Just think of the particular dietary habits of the Turks in which sweet dishes made from honey played a very big role. Surely they had specialists dealing with it. A visual inspection of the topic of hunting, forestry and honey collection reveals that the miserable conditions described by Glatz cannot be substantiated; rather, we must speak of communities that seized sales opportunities, lived in the landscape, and seized the potentials the landscape provided.

SUMMARY

Summing up the data found in the border lawsuits relating to the environment, we can paint an environmental picture that is more nuanced yet in certain respects equivalent to the landscape descriptions, logs and missionary reports.

In the examined period, the biggest change occurred probably on the meadows influenced by the water. Although there are data about the use of meadows even from the years after the liberation, this is after all the scene where we find most of the perished objects. Villages, mills, mill races, roads along streams (even national roads) perished, and the valleys became difficult to traverse. The proliferation of lake-bed remnants, potholes and soggy groves indicates that water management in the period under review was lesser than before, and this was the collateral of the 1683–1686, then the 1704–1711 depopulation and desolation. In addition to the degradation, we also have data about the reaping of the meadows, therefore it is a change of strategy in land use rather than a total destruction that we should talk about.

In 1683 an afforestation commenced, which was replaced in the 1710s by intensive deforestation. Summarizing the data relating to the clearing, we can conclude that the image and condition of the forests was very varied. Some areas were never forested. Where no one settled for an extended period of time, or where there were few people, forestation began. Large forests of timber trees suitable for acorn foraging sprung up on

the sites of old villages. However, around the settlements populated by Serbs, because of more frequent population movements, we can count on the presence of degraded, forested fields and thickets.

The most successful economic sector in the region was forest husbandry, in which both the Hungarians and the Serbs living in the region took an equal part. While on the Great Hungarian Plain it was the cattle, in these parts swine was the most marketable product. The farmers and traders living in the region also kept animals. However, there is a striking difference between the Serbian and Hungarian populations in terms of sheep. The Serbs probably kept larger numbers of sheep and goats, while the Hungarians shaped the landscape by cultivating arable crops. They roamed the countryside equally on the occasions of hunting or collecting honey, and despite bloody wars between the two people, their days consisted of intensive exchange relations and friendly encounters as well. People did not disappear from the region even after the arduous decades. Even before the big seigniorial resettlements commenced (1717), all *pusztas* had their users, sometimes they even had permanently settled Hungarian and Serb residents who have been forced to move out because of the resettlements. Even if they were few in numbers, through their work the seigniorial resettlements relied in fact on seeds of settlements, settlement initiatives, as they cultivated to a sufficient extent the meadows, arable lands, and forests for their self-reliance, and sometimes for their enrichment. The resettlements therefore did not happen in the wilderness. Two thirds of the medieval villages were not resettled, and the vast majority of the villages established by the Ottomans also did not become villages. The new land owners were no longer interested in the collection of natural assets, but rather in asset management. Thus, the attitude has changed; new arrivals on the landscape looked with aversion at the forested wilderness, the ruins, the people used to carrying arms who had earlier wished to pursue effective economic strategies. Their chances for that were decreasing after the resettlements, as by then a whole new cultural landscape was emerging, which in its birth bore the 'denial of the old,' just like any other turning points in landscape history. Like, for example, upon the dissolution of feudalism and the socialist reorganization of agriculture.

REFERENCES CITED

ANDRÁSFALVY, Bertalan

2011 [1978] Nyugat-baranyai német telepesek történeti-néprajzi kérdései a levéltári források tükrében [Historical-Ethnographical Questions of the German Settlers of West-Baranya in the Light of Archival Sources]. In Máré, Gábor (ed) Együtt élő népek – eltérő értékrendek. Andrásfalvy Bertalan válogatott társadalomnéprajzi tanulmányai [Coexisting Peoples – Different Value Systems. Selected Studies of Bertalan Andrásfalvy], 263–279. Budapest – Pécs: PTE Néprajz – Kulturális Antropológia Tanszék – L'Harmattan.

1982 Falusi műveltségi csoportok Baranyában 1975. (Az agglomerációs és urbanizációs folyamatok mikéntje a mai falu társadalmi rétegei és műveltségi csoportjai szerint). [Rural Cultural Groups in Baranya 1975. (Agglomeration and Urbanization According to the Social Strata and Cultural Groups of Today's Village)]. In RECHNITZER, János (ed) Vonzáskörzetek – Agglomerációk I [Clustered Areas – Agglomerations I], 167–199. Budapest: Akadémiai Kiadó.

Ács, Zoltán

- 1987 *A harmadik honalapítás* [The Third Establisment of Hungary]. Budapest: Cosmos Könyvek.
- Ágoston, Gábor Oborni, Teréz
 - 2000 *A tizenhetedik század története* [History of the Seventeenth Century]. Budapest: Pannonica Kiadó.

BAI, József

2008 *Tanulmányok Lengyel község történetéből* [Studies in the History of the Village of Lengyel]. Lengyel: Lengyel Község Önkormányzata.

Bárth, János

- 1989 Szeremlei vallomások [Szeremle Confessions]. Cumania (11):335-424.
- 1990 A határperek néprajzi tanulságai [The Ethnographic Conclusions of Border Litigations]. In SZTRINKÓ, István (ed) Bács-Kiskun Megyei Múzeumi Kutatások 1990 [Museum Research in Bács-Kiskun County 1990], 124–129. Kecskemét: Bács-Kiskun Megyei Múzeumok Igazgatósága.

Bél, Mátyás

1979 [1728] Notitia Hungariae Novae Historico Geographica c. művéből Tolna Vármegye leírása [Description of Tolna County from Notitia Hungariae Novae Historico Geographica]. In K. BALOGH, János (ed) *Tanulmányok Tolna Megye Történetéből IX* [Studies in the History of Tolna County IX], 327–364. Szekszárd: Tolna Megyei Önkormányzat Levéltára.

BORSY, Judit

- 2001 Gazdasági és társadalmi viszonyok 1686-tól 1848-ig. [Economic and Social Relations from 1686 to 1848]. In Füzes, Miklós (ed) Mágocs 1251–2001, 77–115. Mágocs: Mágocs Község Önkormányzata.
- 2003 A pécsi egyházmegye birtoka 1703 és 1736 között [The Estate of the Pécs Diocese between 1703 and 1736]. In FONT, Márta VARGHA, Dezső (eds) A Koller József emlékkonferencia (Pécs, 2002. október 24–25.) válogatott előadásai. [Selected Proceedings of the Koller József Memorial Conference (Pécs, October 24–25, 2002)]. 191–200. Pécs: Pécs Története Alapítvány. (Studies in the History of Pécs 13.)

Dávid, Géza

1974 Some Aspects of 16th Century Depopulation in the Sanjaq of Simontornya. *Acta Orientalia Academiae Scientiarum Hungaricae* 28(1): 63–74.

DUBY, Georges

1978 *Emberek és struktúrák a középkorban* [Hommes et structures du moyen âge. École Pratique des hautes Études and Mouton and Co. People and Structures in the Middle Ages], Budapest: Magvető Könyvkiadó. (Gyorsuló Idő.)

Eperjessy, Kálmán

1993 [1939–42] A települési rend bomlása [The Dissolution of the Municipal System]. In DOMANOVSZKY, Sándor (ed) Magyar művelődéstörténet III [Hungarian Cultural History III]. Szekszárd: Babits Kiadó.

Égeтő, Melinda

1989 Tanúkihallgatási jegyzőkönyvek bársonyosi határviták kapcsán a 18. századból [Minutes of Witness Hearings about Border Disputes in Bársonyos in the 18th Century]. In FILEP, Antal – ÉGETŐ, Melinda (eds) *Történeti források a XVIII–XIX. századból* [Historical Sources from the XVIII–XIX. Century]. 59–92. Budapest: MTA Néprajzi Kutatócsoport. (Documentatio Ethnographica 13.)

Follajtár, Ernő

1942 *Baranya vármegye eltűnt helységei* [The Lost Villages of Baranya County]. Pécs: Magyar Szociográfiai Intézet. (Községi adattár 4.)

Füzes, Miklós

- 1997 Márévár és környékének története a hódoltság megszűnésétől napjainkig [The History of Márévár and its Region from the End of the Occupation to the Present]. In Füzes, Miklós (ed) *Márévár és környéke. Kistáji monográfia* [Márévár and Its Region], 107–244. Magyaregregy: Magyaregregyi Baráti Kör.
- 1998 Alsómocsolád az új- és a legújabb korban [Alsómocsolád in the New and Latest Era]. In Füzes, Miklós (ed) *Alsómocsolád*, 72–166. Alsómocsolád: Alsómocsolád Község Önkormányzata.
- GAÁL, Attila
 - 1984 Az 1686 őszi felszabadító hadjárat grafikai lapjainak Tolna megyei vonatkozásai [The Graphics of the 1686 Liberation Campaign as they Relate to Tolna County]. In VADAS, Ferenc (ed) *A Béri Balogh Ádám Múzeum Évkönyve 12* [Yearbook of the Béri Balogh Ádám Museum 12], 123–155. Szekszárd: Béri Balogh Ádám Múzeum.

GALAMBOS, Ferenc

1989 Winkler Mihály a "közjó" előmozdítója a 18. században [Winkler Mihály, Promoter of the 'Common Good' in the 18th Century]. In *Baranyai Helytörténetírás* 1989 [Baranya Local History 1989], 485–526. Pécs: Baranya Megyei Levéltár.

GLATZ, Ferenc (ed)

2006 *A magyarok krónikája* [Chronicle of the Magyars]. Budapest: Helikon Kiadó – Alexandra Kiadó.

Н. Néметн, István

2001 Háború és népesség a kora újkori Magyarországon (16–17. század) [War and Population in Early Modern Hungary (16–17th Centuries)]. In *Történeti Demográfiai Évkönyv* [Historical Demographic Yearbook], 129–142. Budapest: Központi Statisztikai Hivatal.

HEGYI, Klára

1982 *Egy világbirodalom végvidékén* [In the Borderlands of a World Empire]. Budapest: Gondolat. 2002 Balkáni katonák és katonaparasztok a budai vilájetben [Balkan Soldiers and Peasant Soldiers on the Budin Eyelet]. In GERELYES, Ibolya – Kovács, Gyöngyi (eds) *A hódoltság régészeti kutatása* [Archaeological Research of the Turkish Occupation], 21–35. Budapest: Magyar Nemzeti Múzeum. (Opuscula Hungarica 3.)

HOFER, Tamás

- 1965 Eine eigenartige ungarische Siedlungsform und ihre europaischen Beziehungen. In ORTUTAY, Gyula – BODROGI, Tibor (ed) *Europa et Hungaria*. *Congressus Ethnographicus in Hungaria* (16–20. Oct. 1963), 95–110. Budapest: Akadémiai Kiadó.
- 1985 Europäische Analogien der Entwicklung von Rinderzucht-Monokulturen in der Großen Ungarischen Tiefebene. In ZIMÁNYI, Vera (ed) *Studien zur deutschen und ungarischen Wirtschaftentwicklung 16–20. Jahrhundert,* 89– 102. Budapest: Akadémiai Kiadó.
- HOLLANDER, Arie Nicolaas Jan den
 - 1960–61 The Great Hungarian Plain. A European Frontier Area. *Comparative Studies in Society and History* 3:75–88; 155–167.
- ILYÉS, Zoltán
 - 2007 *A tájhasználat változásai és a történeti kultúrtáj 18-20. századi fejlődése Gyimesben* [Changes in Land Use and the Development of the Historical Cultural Landscape in Gyimes in the 18–20th century]. Eger: Eszterházy Károly College, Department of Geography. (Dissertations of the Geography Department of the Eszterházy Károly College 1.)

K. BALOG, János

- 1978 *Évszázadokon át. Tolna megye történetének olvasókönyve I* [Through the Centuries. Tolna County Historical Reader I]. Szekszárd: Tolna Megyei Levéltár.
- K. Németh, András
 - 2015a *A középkori Tolna megye templomai* [The Churches of Medieval Tolna County]. Pécs: Wosinsky Mór Megyei Múzeum.
 - 2015b *A középkori Tolna megye települései. Településtörténeti adattár* [The Settlements of Medieval Tolna County. Municipal Historical Database]. Kézirat [Manuscript].

KATUS, László

2010 Magyarország a Habsburg Monarchiában (1711–1918) [Hungary in the Habsburg Monarchy (1711–1918)]. In Romsics, Ignác (ed) *Magyarország története* [The History of Hungary], 448–772. Budapest: Akadémiai Kiadó.

Kocsis, Gyula

1979 A Tápió mente falvainak népe, gazdálkodása, települése a XVI–XVII. században [People, Economy, Settlement in the Tápió Region in the 16–17th Century]. *Ethnographia* 90(1):15–41.

Kosáry, Domokos

1990 Újjáépítés és polgárosodás 1711–1867 [Reconstruction and Bourgeoisie 1711–1867]. Budapest: Háttér Lap- és Könyvkiadó. (Magyarok Európában III.)

Makkai, László

1987 Tájak és népek [Lands and Peoples]. In PACH, Zsigmond Pál (chief ed) Magyarország története tíz kötetben 1526–1686 [History of Hungary in Ten Volumes 1526–1686], 1425–1460. Budapest, Akadémiai Kiadó.

Maksay, Ferenc

1976 A dunántúli településrendszer a XVII–XVIII. század fordulójáig [Transdanubian Settlement System until the Turn of the 17–18th Century]. In VEAB Értesítő II. A Dunántúl településtörténete 1. 1686–1768 [VEAB Report II. The History of Settlement in Transdanubia 1. 1686–1768], 43–60. Veszprém: MTA Veszprémi Akadémiai Bizottsága.

Martin, György

1970 *Magyar tánctípusok és táncdialektusok* [Hungarian Dance Types and Dance Dialects]. Budapest: Népművelési Propaganda Iroda.

Máté, Gábor

2014 Research of the Local Road Network. Modern Geográfia (1):1-18.

Mendöl, Tibor

1993 [1939–42] Az új települési rend [The New Settlement Order]. In Domanovszky, Sándor (ed) Magyar művelődéstörténet III [Hungarian Cultural History III]. Szekszárd: Babits Kiadó.

MOLNÁR, Antal

2006 Murin András jezsuita szerzetes szekszárdi útinaplója 1710-ből [Szekszárd Travel Diary of Jesuit Monk András Murin from 1710]. *Levéltári Közlemények* 77(1):105–139.

MUIR, Richard

1984 The Lost Villages of Britain. London: Michael Joseph.

MÜLLER, Róbert

1975 A fonyódi járás középkori településhálózata (A járás X–XV. századi településeinek jegyzéke) [The Medieval Settlement Network of Fonyód District (List of Settlements in the District in the 10–15th Century)]. In KANYAR, József (ed) *Somogy Megye Múltjából* [From the Past of Somogy County], 35–60. Kaposvár: Somogy Megyei Levéltár. (Levéltári Évkönyv 6.)

NEUMANN, Tibor

2003 Telekpusztásodás a késő középkori Magyarországon [Desertion of Land in Late Medieval Hungary]. *Századok* 137(4): 849–884.

ÓDOR, Imre

 1992 Nemesi társadalom a török hódoltság utáni Baranyában [Noble Society after the Ottoman Empire in Baranya]. In *Baranyai Helytörténetírás 1991/1992* [Baranya Local History 1991–1992], 61–92. Pécs: Baranya Megyei Levéltár.

Paksa, Katalin

2010 *Az ugrós táncok zenéje* [The Music of Jumping Dances]. Budapest: L'Harmattan Kiadó.

REUTER, Camillo

1962 Őshonos-e az erdeifenyő a Zselicségben? [Is *Pinus sylvestris* Native to the Zselic Region?] *Erdészeti Lapok* 11(6):284–286.

Rúzsás, Lajos

1964 *A baranyai parasztság élete és küzdelme a nagybirtokkal 1711–1848* [The Life and Struggles with Large Estates of the Peasantry of Baranya 1711–1848]. Budapest: Akadémiai Kiadó.

SZAKÁLY, Ferenc

1997 *Magyar intézmények a török hódoltságban* [Hungarian Institutions during the Ottoman Occupation]. Budapest: MTA Történettudományi Intézete.

Szekfű, Gyula

1936 A föld népe a török hódoltság korában [People of the Land during the Ottoman Occupation]. In SZEKFŰ, Gyula – HóмаN, Bálint (eds) Magyar történet III [Magyar History III], 393–401. Budapest.

SCHMIDT, JÁNOS

1939 Német telepesek bevándorlása Hesszenből Tolna-Baranya-Somogyba a XVIII. század első felében [German Settlers Immigrating from Hessen to Tolna-Baranya-Somogy in the First Half of the 18th Century]. Győr: Baross Nyomda.

SIMMS, Anngret

1976 Deserted Medieval Villages and Fields in Germany. A Survey of the Literature with a Selected Bibliograpy. *Journal of Historical Geography* 2(3):223–238.

Sınкó, Katalin

1989 Az Alföld és az alföldi pásztorok felfedezése a külföldi és a hazai képzőművészetben [The Discovery of the Plain and the Herdsman of the Hungarian Plain in the Foreign and Hungarian Fine Arts]. *Ethnographia* 100:121–154.

Szabó, István

- 1971 *A falurendszer kialakulása Magyarországon (X–XV. század)* [The Development of the Village System in Hungary (10–15th Century)]. Budapest: Akadémiai Kiadó.
- Szekfű, Gyula
 - 1936 A föld népe a török hódoltság korában [People of the Land during the Ottoman Occupation]. In SZEKFŰ, Gyula – HóмаN, Bálint (eds) Magyar történet III [Magyar History III], 393–401. Budapest.

SZILÁGYI, Mihály

1983 Az újratelepülő Tolna megye (1710–1720) [The Re-Population of Tolna County (1710–1720)]. In *Tanulmányok Tolna Megye Történetéből X* [Studies in the History of Tolna County X], 33–168. Szekszárd: Tolna Megyei Levéltár.

Szita, László

- 1987 Budától Belgrádig. Válogatott dokumentumrészletek az 1686–1688. évi törökellenes hadjáratok történetéhez [From Buda to Belgrade. Selected Excerpts of Documents to the History of the 1686–1688 Military Campaigns Against the Turks]. Pécs: Baranya Megyei Levéltár.
- 1993 Somogy megyei nemzetiségek településtörténete a XVIII–XIX. században [Settlement History of Ethnicities in Somogy County in the 18–19th Century]. Kaposvár: Somogy Megyei Levéltár. (Somogyi Almanach 52.)

Takács, Lajos

1976 *Egy irtásfalu földművelése* [The Agriculture of a Clearance Village]. Budapest: Akadémiai Kiadó.

- 1980 Irtásgazdálkodásunk emlékei. Irtásföldek, irtásmódok [Memoirs of Our Clearing Economy. Clearings, Clearing Methods]. Budapest: Akadémiai Kiadó.
- 1983 *Erdei sertéstartás a Dunántúlon* [Forest Swine Keeping in Transdanubia]. Budapest, Manuscript. Néprajzi Múzeum Ethnológiai Archívum [Ethnological Archives of the Museum of Ethnography] 10/2003. 51. d.
- 1987 *Határjelek, határjárás a feudális kor végén Magyarországon* [Border Signs, Border Patrols at the End of the Feudal Age in Hungary]. Budapest: Akadémiai Kiadó.
- T. Mérey, Klára
 - 1967 A XVIII. századi határperek néprajzi és történeti forrásértéke [The Ethnographic and Historical Source Value of 18th Century Borderland Litigations]. *Ethnographia* 78(1): 532–546.
- Tomisa, Ilona
 - 2011 Gyalog és szekéren. Adatok a hódoltság kori Magyarország tájszerkezetéhez 16–17. századi vizitációk alapján [On Foot and by Wagon. Data for the Landscape Structure of Occupation-Era Hungary Based on 16–17th Century Visitations]. In VARGYAS, Gábor (ed) *Párbeszéd a hagyománnyal. A néprajzi kutatás múltja és jelene* [Dialogue with Tradition. The Past and Present of Ethnographic Research], 69–75. Budapest – Pécs: L'Harmattan – PTE Néprajz – Kulturális Antropológia Tanszék.
- То́тн, Péter
 - 1987 Somogyi határvizsgálatok tanulságai [Lessons from Border Investigations in Somogy]. In KANYAR, József (ed) Somogy Megye Múltjából 18 [From Somogy County's Past 18], 149–168. Kaposvár: Somogy Megyei Levéltár.
- VÁRNAGY, Antal
 - 1990 *Hőgyész*. Községtörténeti monográfia *I* [Hőgyész. Municipal Historical Monograph I]. Hőgyész: Hőgyész Nagyközségi Közös Tanács.
- WEIDLEIN, János
 - 1934 Elpusztult falvak Tolnában és Baranyában [Deserted Villages in Tolna and Baranya]. *Századok* 68:611–630.
 - 1935 A dűlőnévkutatás történeti vonatkozásai [The Historical Implications of Toponym Research]. *Századok* 69:665–692.
 - 1936 Dűlőnév és településtörténet [Toponym and Settlement History]. *Magyar Nyelv* 32:20–33.
- WELLMANN, Imre
 - 1979 *Magyar mezőgazdaság a XVIII. században* [Hungarian Agriculture in the 18th Century]. Budapest: Akadémiai Kiadó.
 - 1987 Gazdasági élet Magyarországon a töröktől megszabadító háború idején [Economic Life in Hungary during the Ottoman Liberation War]. In PRAZNOVSZKY, Mihály – BAGYINSZKY, Istvánné (eds) *Gazdaság és mentalitás Magyarországon a török kiűzésének idején* [Economy and Mentality in Hungary during the Expulsion of the Turks], 40–78. Salgótarján: Nógrád Megyei Múzeumok Igazgatósága.

Gábor Máté, born in Komló, Hungary, is an ethnologist and geographer. He wrote his PhD thesis entitled *A Mecsek-vidék tájtörténete. Táj és ember viszonyának változása háromszáz év tükrében* (Landscape History of the Mecsek-area. Changes in the Relations Between Land and Man in the Light of Three Hundred Years) at the Doctoral School of Earth Sciences of the University of Pécs. He is a senior lecturer at the University of Pécs, Faculty of Humanities, Department of Ethnography and Cultural Anthropology. Email-address: mategab@gmail.com